DOCUMENT RESUME

ED 205 736 CE 029 724

TITLE Secondary Schools and the World of Work. The Experiences and Opinions of Queensland Teachers.
INSTITUTION Queensland Board of Teacher Education, Toowong (Australia).
PUB DATE Jul 81
NOTE 33p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Educational Objectives; Educational Philosophy; *Education Work Relationship; Foreign Countries; Individual Characteristics; Relevance (Education); School Business Relationship; *School Role; *Secondary Education; Secondary School Teachers; *Teacher Attitudes; *Teacher Background; Teacher Qualifications; Values; Vocational Education; *Work Attitudes; Work Experience; Work Experience Programs
IDENTIFIERS *Australia (Queensland)

ABSTRACT

This study examined the background characteristics, work experience, extent of contact with the world of work, and attitudes towards work of teachers in secondary schools in Queensland and these teachers' views concerning the role and aims of secondary education, particularly as they relate to preparation for the world of work. Comparisons are drawn between teachers having different amounts of full time work experience, in different types of schools, of various ages, and of either sex, and teaching in different curriculum areas. The results show that more than half of the teachers had some full time work experience. However, the work experience, other than teaching, that teachers had participated in had been mainly for less than two years. The impression given by the results is that teachers see secondary schools as having a role to play in helping students enter the working world, that more emphasis should be given to this aim, and that they would be willing to participate in programs of alternative work experiences and to take students to visit places of employment or to have business persons visit their classrooms. Nonetheless, teachers considered helping students to prepare for the working world to be but one aim of secondary schools, and some teachers felt that students were prepared for the world of work through a general education. Issues for further consideration uncovered by the study include the possibility of alternative work experience programs for teachers, discussion of the aims of secondary education in teacher preparation institutions, and examination of ways of providing teachers with greater exposure to the world of work. (KC)

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ED205736

SECONDARY SCHOOLS

AND THE

WORLD OF WORK

The experiences and opinions of Queensland teachers

Teacher Education Review Committee,

Board of Teacher Education, Queensland

P.O. Box 389, Toowong, Q. 4066.

CE029124

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July 1981

ACKNOWLEDGEMENTS

The Board would like to thank those persons who assisted the Teacher Education Review Committee in the planning of the project and the preparation of the questionnaire used in the survey. These included:

- Mr R. Beckley,
  Personnel and Industrial Relations Manager, Castlemaine Perkins Limited, and Chairman, Education Committee, Queensland Confederation of Industry Limited
- Mr A. Bloomfield,
  Senior Industrial Officer, Metal Trades Industry Association
- Mr L. Hancock,
  Deputy President, Brisbane Chamber of Commerce
- Mr H. Hauenschild,
  President, Queensland Trades and Labour Council
- Mr E. Hook,
  Principal Research Officer, World of Business Educational Research Foundation
- Mr S. Mackenzie,
  Co-ordinator, In-Service Education - Secondary, Department of Education, Queensland
- Mr C. Meyers,
  Subject Master in Mathematics, State High School, Corinda
- Mrs M. O'Donnell,
  Seconded teacher, Curriculum Branch, Department of Education, Queensland
- Mr R. White,
  Subject Master in English, Richlands State High School
- members of the Queensland Economics Teachers Association.

Teachers at All Hallows College also provided valuable comments on a draft of the questionnaire when it was trialled at their school.

The Board would also like to thank those teachers who willingly took part in the survey and so provided the information on which this report was based.

The help given by Jackie Sorensen, who assisted in coding the data and who typed this report is also gratefully acknowledged.

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INTRODUCTION

Purpose

After a person leaves school, he is likely to spend a substantial part of the remainder of his life in the working world. It is often considered, therefore, that schools have an important role to play in preparing their students to enter and to participate in this world of work outside the school.

In recent years, this aspect of a school's function has been given attention by the media, by certain sections of the community including employers, by government and by educationists. As a result, reports such as those prepared by the Commonwealth/State Working Party on the Transition from School to Work or Further Study have appeared. Similarly, the 1980 conference of the Australian Association for Research in Education had as its theme Youth, Schooling and Unemployment.

In broad terms, the purpose of the research project described in this report is to examine certain aspects of the relationship between secondary schools and the world of work. There are many aspects of this relationship which could have been examined. For example, school to work transition programs, career education programs, work experience for students, employers' expectations of school leavers.

This study focussed on the individual secondary school teacher and his background, experiences and opinions. It sought answers to questions such as: What are the characteristics of secondary teachers in Queensland in terms of sex, age, teaching experience, qualifications and family background? What work experiences outside teaching have they had? How often do they arrange for representatives of the world of work to talk to students in their classes, and how often do teachers visit places of employment with their students? To what extent do they consider secondary schools should prepare students for the world of work? What are their attitudes towards work? What are their opinions about alternative programs of work experience for teachers?

The answers to questions such as these may have implications for both pre-service and in-service teacher education.

Methodology

In the early planning stages of the project, discussions were held between the Board of Teacher Education's Teacher Education Review Committee and a number of secondary teachers and members of business and industry and trade unions. The purpose of these discussions was to try to identify some of the important issues in the relationship between secondary schools and the world of work about which it would be useful to collect information.

A questionnaire for completion by individual secondary school teachers was subsequently developed. Comments on the various drafts of the questionnaire were sought from teacher, union and employer groups. Before the final form of the questionnaire was established, it was trialled in a large Brisbane secondary school.

The broad categories of information sought in the questionnaire were outlined above. A more detailed description of the data sought is given below:

- Sex
- Age
- Type and location of school
- Subjects taught
- Position in school
- Teaching experience
- Qualifications
- Type of secondary school attended
- Parents' education and occupation
- Full-time and part-time work experience, other than teaching

Extent of contact between students and the world of work, as arranged by individual teachers

Constraints to organising more of these visits

The adequacy of the curriculum in preparing students for the world of work

Teachers' attitudes towards work

The aims of secondary education

Teachers' opinions about programs of alternative work experience for teachers.

A random sample of 1 in 15 teachers who were teaching in both government and non-government secondary schools in Queensland was selected for inclusion in the study. Teachers were chosen from the alphabetical list of registered teachers held by the Board of Teacher Education using an equal interval random start method. In this manner, 613 teachers were selected.

In October 1980, questionnaires were forwarded, through the principal, to those teachers chosen in the sample. After a follow-up letter, 483 questionnaires were returned, representing a satisfactory response rate of 79 per cent.

BACKGROUND CHARACTERISTICS

Some general background characteristics of teachers in Queensland secondary schools are presented in this section. They include type and location of school, sex, age, teaching experience, subjects taught, qualifications, secondary school attended and family background. This information was collected firstly, because it is of interest in its own right and secondly, so that responses to later questionnaire items could be analysed in terms of certain of these background characteristics.

Type and location of school

The type and location of the schools in which the respondents to the questionnaire were currently teaching is shown in Table 1.

Table 1: Type and location of current school

Type	**%**
Government	69
Catholic	20
Non-government non-Catholic	11
Location	
Metropolitan	53
Provincial city	26
Country	21

Table 1 shows that over two-thirds of the respondents were teaching in government schools and slightly more than half were in metropolitan schools. For the purposes of this study, Ipswich, Gold Coast and Redcliffe were regarded as metropolitan areas.

Statistics available from the register of teachers, obtained in November 1980, (Board of Teacher Education, 1981) indicate that the proportion of respondents in government and non-government schools closely approximates that for all secondary teachers teaching in Queensland. These population figures show that 69 per cent of registered teachers teaching in secondary schools were in government schools and 31 per cent were teaching in non-government schools.

Age and Sex

There was a slight majority of men in the sample (53 per cent). The population statistics which show that 52 per cent of Queensland secondary teachers are men (Board of Teacher Education, 1981), indicate the representativeness of the sample in terms of sex. Data collected by Bassett (1980) showed that the average proportion of male teachers in Australian secondary schools was 58 per cent.

There was a higher proportion of male teachers in government schools than in non-government schools. The proportion of male teachers in government schools was 55 per cent, in Catholic schools, 44 per cent and in non-government non-Catholic schools, 48 per cent.

The age distribution of the respondents, tabulated against type of secondary school in which teaching, is given below in Table 2.

The data in Table 2 indicate that teachers in secondary schools are relatively young, with nearly half the teachers being 30 years old or less, and only 21 per cent over 40 years old. Again, these figures closely approximate the age distribution of all registered secondary teachers in Queensland (Board of Teacher Education, 1981). The Queensland results with respect to age are similar to the Australian results found by Bassett in his 1979 survey. For example, Bassett found that 52 per cent of secondary teachers were 30 years or less, and that 22 per cent were more than 40 years old.

Table 2: Age of respondents by type of secondary school

Age Group*	Type of secondary school			
	Government	Catholic	Non-govt non-Catholic	Total
	% (N = 332)	% (N = 96)	% (N = 52)	%
Less than 25 years	18	16	6	16
25-30 years	32	26	23	30
31-40 years	32	35	31	33
41-50 years	10	16	21	12
51-60 years	7	4	15	7
Over 60 years	1	3	3	2

* Age group unspecified by three respondents

From Table 2, it can be seen that teachers in non-government schools, and especially non-government non-Catholic schools were older than teachers in government schools. To illustrate, 39 per cent of teachers in non-government non-Catholic schools were over 40 years, whereas 18 per cent of teachers in government secondary schools were over 40.

Another finding of interest with regard to sex and age of teachers was that, on average, male teachers were older than female teachers. Table 3 shows these results.

Table 3: Age by sex of respondents

Age Group	Sex		
	Male	Female	Total
	% (N = 249)	% (N = 231)	%
Less than 25 years	9	23	16
25-30 years	30	30	30
31-40 years	39	26	33
41-50 years	12	12	12
51-60 years	7	8	7
Over 60 years	2	1	2

Table 3 indicates that, while the proportion of teachers who were older than 40 was about the same for both men and women, a larger proportion of women teachers were in the youngest group of less than 25 years.

Teaching Experience

Consistent with the data on age, the results for teaching experience, as shown in Table 4, indicate a relatively inexperienced teaching profession in terms of length of secondary school teaching experience.

The relative inexperience is illustrated by the finding that one-third of the teachers had less than six years' secondary teaching experience, while almost two-thirds had less than eleven years' experience teaching in secondary schools. The pattern of secondary teaching experience of Queensland teachers is very similar to the Australian pattern (Bassett, 1980).

Table 4: Secondary teaching experience

	%
Less than one year	8
1–5 years	25
6–10 years	29
11–20 years	26
More than 20 years	8
Non-response	4

Teachers were also asked to indicate their extent of teaching experience in pre-school, primary, trade or TAFE, tertiary and special education. It was found that about one-quarter of secondary teachers had some primary teaching experience. Very few, however, had taught students in any of the other groups. These results are summarised in Table 5.

Table 5: Proportion of secondary teachers with experience at levels other than secondary

	%
Pre-school	1
Primary	24
TAFE/Trade	4
Tertiary	5
Special	2
Other	4

Current Teaching Situation

Nearly all of the respondents (96 per cent) had regular teaching duties in their school. Nonetheless, there was a substantial number of teachers who were also administrators (7 per cent), subject masters or co-ordinators (20 per cent) or classified themselves in an 'other' category (6 per cent).

The teachers in the sample taught a wide range of subjects. The major curriculum areas of the respondents are shown in Table 6. Respondents were asked to indicate only one major curriculum area.

Table 6: Major curriculum area of secondary school teachers

	%
English	14
Mathematics	13
Sciences (including Chemistry, Physics, Biological Sciences)	16
History	4
Geography	4
Foreign languages	4
Home Economics	8
Commercial Studies	9
Manual Arts	7
Art	3
Physical Education or Health and Physical Education	5

Educational Background

Teachers obtained their initial teaching qualifications in a diverse number of ways. Table 7 shows the type of course, the type of institution and the location of the institution at which they obtained their initial qualification.

Table 7 Initial qualification of secondary teachers

Type of Qualification	%
One-year course	11
Two-year course	23
Diploma of Teaching	21
Pre-service Bachelor of Education	3
Degree only (e.g. Bachelor of Arts)	4
Degree plus Diploma of Education	27
Other	10
Type of institutions at which obtained	**%**
University only	29
College of advanced education or teachers college only	49
Both university and college of advanced education	14
Other	7
Location	**%**
Queensland	79
Interstate	12
Overseas	9

The predominant methods of obtaining initial pre-service teaching qualifications were by a two-year course, a Diploma of Teaching or a degree plus a Diploma of Education or Graduate Diploma of Teaching.

More of the teachers were educated in a teachers college or college of advanced education only, than in a university only or in a combination of the two. Most respondents undertook the majority of their pre-service preparation in Queensland, although a sizeable number undertook it interstate or overseas.

It is of interest to note that a higher proportion of teachers in non-government non-Catholic schools than teachers in government or Catholic schools had attended a university as part of gaining their pre-service qualification - the proportions being 60 per cent, 42 per cent and 41 per cent for non-government non-Catholic, government and Catholic schools respectively.

Also of interest is the finding that a greater proportion of teachers in government schools than in non-government schools received the majority of their pre-service preparation in Queensland. Eighty-seven per cent of teachers in government schools, 57 per cent of teachers in Catholic schools and 73 per cent of teachers in non-government non-Catholic schools undertook the majority of their pre-service preparation in Queensland. The major difference with respect to location of pre-service education among various types of schools was that a large proportion of Catholic and non-government non-Catholic teachers gained their initial qualification interstate. There was little difference in the proportion of each group of teachers educated overseas.

Teachers were asked to indicate the nature of any qualifications, apart from their pre-service teaching qualification, which they had obtained. The most common amongst these were: a Bachelor's degree (other than Education) obtained by 92 teachers, Bachelor of Education or Educational Studies by 48 teachers, a Trade Qualification by 35 teachers, a Diploma or Graduate Diploma by 34 teachers, (including 11 who had completed an upgrading Diploma of Teaching), and a masters degree by 11 teachers.

Table 8 shows details of the secondary school attended by respondents for the majority of their secondary education.

Table 8: Secondary school attended

		%
Type		
	Government	65
	Catholic	21
	Non-government non-Catholic	14
Location		
(i)	Queensland	77
	Interstate	13
	Overseas	10
(ii)	Metropolitan	54
	Provincial city	22
	Country town	24
Mode of attendance		
	As a day student	88
	As a boarder	12
	As an evening student	-
	As a correspondence student	-

It can be seen from the table that the majority of teachers had what might be regarded as a conventional education. Most attended a government secondary school, were educated in Queensland and were day students. It should be noted, nonetheless, that a sizeable proportion undertook the majority of their secondary education either interstate (13 per cent) or overseas (10 per cent).

A crosstabulation of the type of secondary school attended with the type of secondary school in which presently teaching produced the interesting result shown below in Table 9.

Table 9: Current school by secondary school attended

		Current School		
		Government	Catholic	Non-govt non-Catholic
		% (N = 330)	% (N = 95)	% (N = 51)
Secondary* school attended	Government	75	35	53
	Catholic	15	52	6
	Non-government non-Catholic	10	14	41

* Non-respondents = 7

Table 9 shows the tendency for a large number of teachers to return to teach in the same type of secondary school which they attended as a student. Thus, 75 per cent of teachers currently teaching in government schools attended a government secondary school, 52 per cent of teachers in Catholic secondary schools attended a Catholic secondary school as students, and 41 per cent of non-government non-Catholic teachers attended a similar type of secondary school. These figures can be compared with the overall proportion of respondents who attended government, Catholic and non-government non-Catholic secondary schools - 65 per cent, 21 per cent and 14 per cent respectively.

Family Background

It is sometimes said that a large proportion of teachers come from homes in which one or more parents are also teachers. The results of this study indicate, however, that this is not true of teachers in Queensland secondary schools. Only a small proportion of teachers had either a mother (7 per cent) or a father (6 per cent) who had ever been a teacher.

Indeed, the results indicate that teachers have come from a wide variety of family backgrounds. The major occupations in which teachers' fathers were engaged while the teachers were at school are shown in Table 10 below. The occupations were coded using the scheme developed by Broom, Jones and Zubrzycki (1965) with the exception that graziers and other farmers have been combined. Using statistics from the 1966 Census as a reference point, the proportion of the total male Australian workforce is also shown for comparison purposes. These statistics are reported by Broom and Jones (1976). Between 1961 and 1971, this distribution did not change markedly, although a drop in the proportion of farmers and farm workers is noted.

Table 10: Occupations of respondents' fathers and occupational distribution of Australian male workforce - 1966

Occupational Group	Secondary teachers' fathers*	Australian male workforce 1966
	%	%
Professional	17	8
Managerial	15	9
Clerical	18	14
Skilled manual	19	21
Semi-skilled manual	8	21
Unskilled manual	6	16
Graziers and farmers	15	7
Farm and rural workers	3	4

* A reasonably high proportion of teachers (8 per cent) either did not respond to question or gave an uncodeable response. Percentages given are proportion of codeable responses.

Table 10 shows that 17 per cent of secondary teachers were the sons and daughters of professional fathers; 15 per cent of managerial fathers; 18 per cent of clerical fathers; 19 per cent of fathers who were skilled manual workers; and 15 per cent of fathers who were farmers. In terms of the occupational distribution of the Australian male workforce, there was an over-representation of teachers from professional, managerial and farm homes, and an under-representation from homes in which the father was a semi-skilled or unskilled manual worker.

The mothers of 83 per cent of the teachers were engaged in full-time home duties for the majority of time the teachers were attending school as pupils and students.

With respect to educational level obtained by teachers' parents, 47 per cent of the fathers had attended secondary school and a further 15 per cent had a tertiary education. Fifty-six per cent of the mothers had a secondary education, and an additional 7 per cent were tertiary educated.

WORK EXPERIENCE OTHER THAN TEACHING

It has recently been recommended by certain educational inquiries that teachers should spend some time in work other than teaching. For example, the Williams report (Committee of Inquiry into Education and Training, Vol. 3, 1979, p.8) recommended that there should be "opportunities for the short-period release or secondment of teachers to other fields of work". The Select Committee on Education in Queensland (Final Report, p.12) considered that "necessary liaison should be established with the private sector and other Public Service Departments to allow teachers to spend some time working in one of these areas as a normal part of their service". Recommendations of this type are strengthened by the view that teachers have little experience in work other than teaching. To illustrate, the Queensland Economics Teachers Association submission to the Select Committee on Education in Queensland (see Hook, 1980, p.69) claimed that "the majority of teachers have limited or no practical experience outside of educational institutions". By giving teachers alternative work experience, the argument runs, they will be better equipped to teach their students about the types of jobs they may enter after leaving school. Thus, in a submission to a South Australian Working Party employers claimed that -

> teachers should spend some of their time in commerce and industry so that they would be better prepared to advise their students, and would then try to introduce into the curriculum more subjects relating directly to working life. (Report of Working Party on the Transition from Secondary Education to Employment, 1976, p.64).

In the light of the above, it is important to consider firstly the extent of teacher participation in work other than teaching and the types of occupations in which they have been engaged. It is also important to consider teachers' views on alternative programs of work experience for teachers - would they be interested in participating and in what types of occupations would they be interested in gaining experience? This report attempts to answer these two questions. In doing so, it provides information which might be used in planning programs of work experience for teachers or students in teacher education institutions.

An issue which also needs to be carefully considered is not dealt with by this survey. That is, does involving teachers in programs of work experience for teachers make any difference to the way in which they teach their students, and, in particular the way they help their students learn about the world of work outside the school?

Previous Full-time Work Experience

Teachers were asked to indicate the full-time occupations (other than teaching) in which they had been engaged, and the length of time in which they had been involved in each occupation. They were also asked to indicate how long they had spent in each occupation during four different stages of their education - before completing secondary studies, after secondary studies and before teacher training, during teacher training and after completing teacher training.

In all, slightly more than half of the 483 teachers had some previous full-time work experience. The amount of time spent by teachers in other types of work and the period of their careers in which it was spent is given in Table 11 below. Teachers were asked to include vacation employment.

If the "Total" figures in the top row are considered, it can be seen that a large proportion of those who have full-time work experience other than teaching have worked in other occupations for short periods of time. Moreover, including those who have no other work experience, about two-thirds of teachers in Queensland secondary schools have one year or less of full-time work experience in an occupation other than teaching. On the other hand, at least 87 teachers or 18 per cent of total respondents have engaged in other full-time work for a period of more than two years. Of these, most undertook this employment before completing their teacher preparation. Five per cent of Queensland secondary teachers have been engaged in another occupation, full-time, for more than five years.

Table 11: Number of teachers with full-time work experience at various stages of their career

	DURATION						
	3 months or less	4-12 months	1-2 years	2-5 years	More than 5 years	Unspecified	Total
TOTAL*	24	65	26	64	23	43	245
Before completing secondary school	29	13	3	10	3	13	71
Before commencing teacher training	33	26	7	34	15	21	136
During teacher training	26	26	6	4	1	21	84
After teacher training	15	24	14	21	3	15	92
Number without full-time work experience = 238							

* Figures in this row are number of teachers who have had total work experience of various lengths of time. The individual column entries do therefore not sum to the total.

In Bassett's survey of teachers, it was found that 74 per cent of Queensland secondary teachers had at least two years' experience in an occupation other than teaching. It is not possible to directly compare Bassett's results and the findings of the present report for periods of less than two years, as Bassett's report excluded vacation employment while this survey included it. Bearing this in mind, it is significant to note that Bassett found that 66 per cent of Queensland secondary teachers had had no work experience other than teaching (when "nil" and "nil response" are summed). The difference between Bassett's findings and the findings of this report (which show 49 per cent without any full-time work experience) can probably be largely explained in terms of vacation employment. For Australia as a whole, Bassett's results showed 61 per cent of secondary teachers without work experience other than teaching and 27 per cent with more than two years' experience.

It is also of interest to note that 82 teachers were in full-time occupations for more than three months after completing secondary school and before completing teacher training. These might be seen as a group of teachers who did not undertake teacher education in the semester immediately after their secondary education but engaged in some other occupation between the two.

The majority of teachers who were involved in other occupations were employed as:

- clerical and office workers (85 teachers)
- shop assistants (49)
- tradesmen or apprentices (46)
- labourers (28)
- waiters, bar tenders (27)
- farm or rural workers (20)
- members of armed services (18)
- factory workers (15)
- drivers, railway workers (14)
- storemen and packers (11).

Of the above occupations, the only ones which were engaged in by a majority of respondents for more than one year were tradeswork or apprenticeships or military service. These data suggest that the only major groups who switched to teaching after embarking initially on another career were those who were formerly tradesmen or apprentices. For most of the other positions, it appears that many teachers sought positions only on a temporary basis.

Further analysis of the results indicates that the former tradesmen were now mainly manual arts teachers who entered teaching via a special trades entry teacher education course. When the 35 manual arts teachers are removed from the analysis, the number of teachers who have had some full-time work experience falls from 245 to

214. More significantly, the proportion with more than two years' full-time work experience drops from 18 per cent to 13 per cent when the manual arts teachers are excluded.

A breakdown of the major occupations by stage of education at which teachers were involved in them is given in Table 12.

Table 12: Major occupations in which teachers involved

	WHEN INVOLVED			
	Before completing secondary school	Before commencing teacher training	During teacher training	After teacher training
Clerical and office workers	10	43	18	32
Shop assistants	30	16	16	5
Tradesmen or apprentices	5	24	3	5
Labourers	6	13	9	6
Waiters, bar tenders	-	8	15	6
Farm or rural workers	7	7	8	5
Members of armed services	-	3	5	13
Factory workers	4	5	5	3
Drivers, railway workers	2	5	6	3
Storemen and packers	5	6	4	1

The occupation in which teachers were most often involved before secondary school was as shop assistants; before commencing teacher training the most common occupations were clerical and office work, trades or apprenticeships, labouring and as shop assistants; during teacher training they were clerical and office workers, shop assistants and waiters or bar tenders, and after teacher training they were clerical and office workers and members of the armed services.

Comparing length of full-time experience in other occupations among the types of school reveals that a higher proportion of teachers in government and Catholic schools than in non-government non-Catholic schools have had no outside work experience - the proportions being 49 per cent, 55 per cent and 38 per cent respectively. This difference is most marked in the older teachers. Of teachers over 30 years, the proportions with no full-time work experience outside teaching are 43 per cent for government schools, 62 per cent for Catholic schools, and 29 per cent for non-government non-Catholic schools.

Previous Part-time Work Experience

Teachers were asked to indicate the nature of their previous part-time work experience outside teaching in the same manner as they indicated full-time work experience. The results are shown in Table 13.

Table 13 indicates that 65 per cent of Queensland secondary teachers have had some part-time work experience other than teaching. As with involvement of teachers in full-time occupations, the majority of this work experience was undertaken by teachers for short periods of time. Nonetheless, 18 per cent of teachers had been engaged in part-time occupations for more than two years.

Table 13 also shows that a large proportion of future teachers undertook part-time employment during secondary and tertiary studies. A smaller number have undertaken part-time employment after completing their teacher preparation.

Table 13: Number of teachers with part-time work experience at various stages of their career

	DURATION						
	3 months or less	4-12 months	1-2 years	2-5 years	More than 5 years	Unspecified	Total
TOTAL	29	69	37	75	14	90	314
Before completing secondary school	43	31	20	24	3	57	178
Before commencing teacher training	52	11	12	12	-	43	130
During teacher training	24	53	17	30	1	48	173
After teacher training	23	19	5	19	5	23	94
Number without part-time work experience = 169							

The major part-time occupations in which teachers were involved were:

- shop assistants (126 teachers)
- waiters, bar tenders (68)
- clerical and office workers (52)
- labourers (48)
- farm and rural workers (34)
- factory workers (30)
- postal workers (23)
- tutors, workers in education (22).

Opinions concerning involvement in alternative work experience programs for teachers

A large majority of teachers (81 per cent of respondents) were in favour of the proposition that teachers should spend some time in work experience, other than teaching, as part of their normal career pattern. A similar majority (76 per cent of respondents) indicated that they would be prepared to participate in a program of alternative work experience for teachers in an out of school situation for an extended period of several months.

The concept of programs of alternative work experience was equally highly endorsed by teachers in different types of schools, of different ages and teaching various subject areas. The proportion of manual arts and commercial teachers indicating that work experience should be part of a teacher's normal career pattern was, however, somewhat higher than the average - in each case more than 90 per cent endorsed the idea.

Similarly, there was equal willingness on the part of teachers from the different types of schools to participate in a work experience for teachers program. Younger teachers expressed slightly greater readiness to participate in such a program than did older teachers. A very high proportion of manual arts teachers (94 per cent) indicated that they would be willing to be involved in the program.

The major types of occupations in which the teachers indicated that they would be interested in participating were:

- clerical and office work (73 teachers)
- trades (45)
- managerial (42)
- computer programming (32)
- social work/child guidance (25)
- public relations/advertising (22)
- catering (22)
- farming (18)
- architecture, engineering, surveying (17)
- nursing, professional medical work (17).

It is interesting to compare the above list of occupations with those in which teachers had previously participated. While clerical and office work was rated highly in all lists, there was nonetheless a tendency for the occupations in which teachers would be interested in participating to include more professional and skilled occupations.

TEACHER AND CLASS CONTACT WITH WORLD OF WORK

In this section, the number of times which individual teachers organised visits from business firms, industry associations and employee associations to talk to students in their classes, the types of organisations which spoke to children in class, and reasons why more visits were not organised are examined. In addition, the number and nature of visits by the teacher with his classes to places of employment and reasons constraining more of these visits are explored.

In considering the results, it must be recognised that they reflect the amount of contact that the individual teacher with his classes has had with the world of work. The results do not give an account of the amount of student involvement, as part of the school program, with the world of work. A large number of teachers (75 per cent) were in schools in which there was a careers or guidance officer who was responsible for organising visits. In some schools, therefore, it might have been more appropriate for the careers or guidance officer, rather than the individual teacher, to arrange visits to or from organisations outside the school.

Further, the results do not generally show initiatives that have been organised at a school level to promote greater contact between students and the working world. A useful outline of the types of school initiatives implemented in Queensland to help students to enter the world of work can be found in the Report to Schools from the Director's Committee on Secondary Education (Department of Education, 1979). The following programs illustrate the kinds of initiatives which secondary schools have developed to increase student contact with and awareness of the world of work: Work Experience programs, Link courses with TAFE, Career Awareness programs, Youth Employment Training, Job Readiness courses. Interested readers are referred to the Director's Committee Report mentioned above for more detailed information.

Teacher-initiated Visits from World of Work to Teacher's Classes

The number of times individual teachers were responsible, either directly or through the guidance officer, for organising business firms, industry associations, employee associations or other groups in the workplace to talk to their students was not great. Seventy per cent of teachers had not had any such visits occur, 9 per cent had had one, 8 per cent - two and 6 per cent - three. As pointed out previously, the fact that three-quarters of the teachers were in schools in which there was a careers or guidance officer responsible for organising contact between the school and the working world should be borne in mind when interpreting the results.

There was not a great deal of variation among the different kinds of schools with respect to the number of visits arranged by teachers. Notwithstanding this comment, teachers in Catholic schools tended to arrange slightly more visits than teachers in other schools - 11 per cent of teachers in Catholic schools had arranged for four or more visits compared with 6 per cent of teachers in the other schools.

A comparison of the number of visits for teachers who specified the various curriculum areas as their major teaching field is also of interest. Because the number of teachers indicating any given teaching area is reasonably small, these results must be taken as tentative. The findings are further clouded by the fact that the visits teachers arranged were not necessarily concerned with their major curriculum area, but might have been for classes taken in their second teaching subject. Bearing this in mind, the results tend to indicate that Physical Education (25 teachers total), Art (16), Mathematics (61) and Foreign Language (17) teachers had fewer than average visits, while History (19), Geography (17) and Commercial (41) teachers had more than the average number of visits.

While teachers arranged for a wide variety of organisations to visit their classes, the major ones were:

- government or semi-government organisations (33)
- post-secondary educational institutions (28)
- banks/finance companies (28)
- local businesses/retail sales establishments (25)
- Commonwealth Employment Service (24)
- industrial plants, factories (24)
- insurance companies (20)
- armed services (15).

Teachers were asked to indicate whether they would prefer more of this kind of visit and to indicate the extent to which eight listed reasons constrained more visits taking place. The non-response rate to these questions was rather high, ranging from 9 per cent to 13 per cent. This was largely because some teachers who had not had any visits ignored these questions. In reporting results, the percentages given are the proportion of respondents to the question rather than the total number of teachers who returned questionnaires.

A large majority of teachers (84 per cent) claimed that they would like more members of the world of work to visit students in their classes. While this study cannot provide direct evidence which shows that having these visits is of use to students, the fact that most teachers wanted more gives an indirect indication of their value.

The extent to which teachers saw each of eight listed reasons as a constraint to organising more visits is shown below in Table 14.

Table 14: Reasons constraining more visits from members of working world to classroom

	Very Important %	Moderately Important %	Slightly Important %	Un-important %
School policy	20	22	23	35
Finance	11	20	23	46
Teacher's lack of time	40	32	17	11
Timetabling difficulties	34	37	18	11
Unwillingness of suitable representatives to participate	10	29	32	30
Unavailability of suitable representatives	18	28	30	24
Lack of interest shown by students	10	24	33	32
Lack of interest shown by colleagues	8	22	32	38

It is clear from Table 14 that teachers consider that the major constraints against arranging more visits are the teacher's lack of time and the difficulty of fitting the visits in to the school timetable. All of the other listed reasons were rated as slightly important or unimportant by the majority of respondents.

The answers to this question were analysed by type and location of school. Differences in the responses among government, Catholic and non-government non-Catholic schools were not great. The following differences are, however, highlighted:

- Teachers in Catholic schools reported school policy to be less of a constraint than did teachers in government or other non-government schools - the proportions considering school policy as a very important or moderately important constraint were 31 per cent for Catholic schools, 45 per cent for government schools and 53 per cent for non-government non-Catholic schools.

- Lack of interest shown by students was rated as more important by teachers in government schools than in other schools - the proportions considering this very important or moderately important being 39 per cent for government schools, 26 per cent for Catholic schools and 22 per cent for non-government non-Catholic schools.

- Unavailability of suitable representatives was more important for country teachers (59 per cent rating it as a great or moderate constraint) than provincial city teachers (48 per cent) or metropolitan teachers (39 per cent).

Class Excursions with Teacher to Places of Employment

The level of involvement of teachers in visiting places of employment with their students was similar to that for members of the world of work coming into the classroom. Seventy-one per cent of teachers had not taken their students to any places of employment; 13 per cent had taken them to one; 7 per cent had taken them to two; and 8 per cent of teachers had taken their students to three or more places of employment.

The number of visits was very similar in government, Catholic and non-government non-Catholic schools.

Bearing in mind the caveat issued before, teachers who specified Geography, Home Economics or Commercial studies as their major curriculum area tended to take their students on greater than average number of visits, and teachers of Foreign Languages and Physical Education tended to take their students on fewer than average visits.

The main places visited were:

- industrial plants, factories (71)
- government and semi-government organisations (39)
- local businesses, retail sales establishments (27)
- post-secondary educational institutions (20)
- farms (16).

There was a great deal of support among teachers for more of these visits - well over half of the teachers indicated that they would like to have more visits to the "world of work".

An analysis of visits to the world of work by geographical location of schools revealed that fewer teachers in metropolitan schools than in provincial city schools and fewer teachers in provincial city schools than country schools took their students on such excursions. Seventy per cent of metropolitan teachers, 67 per cent of provincial city teachers and 55 per cent of country teachers made no such visits. It is also interesting to find that a higher proportion of teachers in country schools wanted more excursions to the workplace than did teachers in metropolitan or provincial city schools.

The importance given by teachers to eight listed reasons for not taking their students to more places of employment is shown in Table 15.

Table 15: Reasons constraining more visits to places of employment

	Very Important %	Moderately Important %	Slightly Important %	Un-important %
School policy	27	27	21	25
Finance	27	27	24	22
Teacher's lack of time	43	30	17	10
Timetabling difficulties	43	34	17	6
Unwillingness of suitable organisations to participate	9	26	36	29
Unavailability of suitable organisations	18	28	28	26
Lack of interest shown by students	8	24	29	39
Lack of interest shown by colleagues	7	23	32	38

The non-response rate to this question was quite high - about 18 per cent. There appear to be two reasons for this. As before, some teachers who had not arranged any excursions ignored the question. The number of non-responses was also probably increased because the reasons listed were the same as those listed for not inviting more representatives of the world of work into the classroom. Some teachers may

have felt that they would be duplicating their previous response by answering the question, and so left it unanswered. The percentages reported are of the number of responses to the question.

The teacher's lack of time and timetabling difficulties are the main reasons given by teachers for not organising more visits to places of employment. In addition, slightly more than half of the respondents thought that school policy and finance were very important or moderately important constraints to arranging more excursions. In all other cases, a majority of respondents rated the reasons as slightly important or unimportant.

Responses to this question were analysed by type and geographical location of school. The most striking difference found was that teachers in country schools rated unavailability of suitable organisations as much more important for not organising more visits than did their metropolitan or provincial city counterparts. Sixty-five per cent of teachers in country schools considered unavailability of suitable organisations to be a very or moderately important reason why more excursions to places of employment were not undertaken, and significantly, 37 per cent of country teachers considered this factor very important. The proportion of teachers in metropolitan and provincial city schools who rated unavailability of suitable organisations as a very or moderately important constraint was much lower - 42 per cent and 38 per cent respectively.

The other differences of interest were:

- School policy as a constraint to more visits was considered less important by teachers in Catholic schools - 40 per cent considering it was of great or moderate importance compared with 58 per cent in other schools.

- Lack of interest shown by students was rated more important by teachers in government schools - 36 per cent of these teachers considered that it was very or moderately important compared with 23 per cent of teachers in other schools.

THE ROLE OF SECONDARY SCHOOLS IN PREPARING STUDENTS FOR THE WORLD OF WORK

This section deals with secondary teachers' opinions concerning the aims of secondary education and the adequacy of the curriculum in the various subject areas in preparing students for the world of work.

Aims of Secondary Education

Teachers were asked to rate their level of agreement on a five point scale (strongly agree, agree, undecided, disagree, strongly disagree) that each of 19 items should be a major aim of secondary education. They were also asked to indicate whether the present emphasis on each aim in secondary education in Queensland should be increased, decreased or remain the same.

Items in the list of aims included those that were related to the secondary school's role in preparing students for the world of work. To provide a balance, and to gain some idea of priorities, a second group of items, concerned with what might be regarded as personal development of students was also included. Some items were taken from Henderson's study (1980) on aims of alternative general education courses in Western Australia and from Campbell and Robinson's study (1979) on community beliefs about schooling. Others were written especially for this study.

In order to provide a check that the items were in fact measuring two clusters of aims, a factor analysis was carried out on the responses. Factor analysis is a statistical technique which may be used to explore the way in which items cluster together to form a meaningful set (see Nie et al, 1975, for a detailed explanation of factor analysis). The factor analysis revealed that those items which had been previously designated as reflecting aims of secondary education concerned with personal development did form a factor or meaningful group of items. Those designed to measure aims related more directly to preparing students for the working world tended to split into two clusters. The first of these might be seen as preparation for the world of work in a general way, while the second was more concerned with preparing students for specific types of occupations. One aim (to prepare students to enter tertiary education) did not fall readily into any of the three groups.

Thus, the aims of secondary education reflected in these items would be considered to fall into three clusters - those concerned with personal development of the student, those concerned with preparing students generally for the working world, and those concerned with preparing students for certain types of occupations.

The proportion of respondents agreeing with each aim of secondary education (i.e. agreeing or strongly agreeing) and the proportion favouring an increase are given in Table 16.

Table 16: Proportion of respondents agreeing with each aim of secondary education, and proportion favouring an increase in current emphasis in Queensland secondary schooling

Item No.	Item	Proportion agreeing %	Proportion favouring increase %
13.	Developing in each child a sense of personal worth and esteem	100	82
14.	Teaching students how to co-operate with other people	99	80
3.	Teaching basic literacy and numeracy skills	98	69
4.	Making students aware of different types of jobs/ careers available and what is involved in each one	97	73
17.	Helping students appreciate cultural activities	97	72
18.	Assisting students in forming positive attitudes towards work	97	79

Item No.	Item	Proportion agreeing	Proportion favouring increase
		%	%
1.	Teaching basic problem-solving skills so students are competent to solve problems in a job situation	96	80
11.	Helping students to gain an understanding of the training and educational background required to enter specific occupations	95	69
16.	Assisting students to profitably enjoy their leisure activities	94	69
2.	Teaching students how to go about getting a job (e.g. interview, personal appearance)	93	74
5.	Helping students to understand their future role as members of the workforce	93	74
19.	Preparing students for the possibility of unemployment	91	72
6.	Helping students understand the expectations of employers	91	73
8.	Helping students understand how a business operates	80	50
12.	Preparing students to enter tertiary education	79	26
15.	Helping students to gain an understanding of the type of job they are likely to be doing	79	56
10.	Teaching students about safety in industry	73	48
9.	Helping students to understand the role of managers in business	66	43
7.	Teaching students skills that will be used directly in their jobs	58	40

Examination of Table 16 indicates that teachers strongly endorsed those aims of secondary education concerned with personal development (Items 13, 14, 16, 17, 18, 19) and would also support an increase in emphasis on these aims. More than 90 per cent of respondents thought that each of these six aims should be a major aim of secondary education, and over two-thirds wanted an increase in current practice in Queensland secondary schools on each aim.

Teachers also agreed that secondary schools should aim to help students to prepare for employment and the world of work in a general way (particularly Items 1, 2, 3, 4, 5, 6 and 11) by, for example, "teaching students how to go about getting a job" and "helping students understand their future role as members of the workforce". There was also a consensus that the emphasis on these aims should be increased, with more than two-thirds of respondents indicating that there should be an increase in present emphasis.

The remainder of the aims, while still endorsed by a majority of teachers, were not rated nearly as highly. These items, with the exception of Item 12, might be considered to be related more to preparing students for specific types of employment rather than to the world of work in general. For example, Items 8 and 9 refer specifically to "a business" and Item 10 to "safety in industry". In particular, teachers could not agree that teaching students skills that will be used directly in their job should be a major aim of secondary education. Moreover, there was a lack of consensus among teachers that emphasis on these aims should be increased, the proportion favouring an increase generally being in the 40-50 per cent range.

In general, a reasonably high proportion (79 per cent) of teachers felt that a major aim of secondary education should be to prepare students to enter tertiary education (although this item was not endorsed as highly as items related to personal development or general preparation for the world of work). However, teachers did not consider that there should be any increase in emphasis of this aim of secondary education - only about one-quarter favoured an increase.

It should be noted that, with the exception of Item 12, a very small proportion of teachers thought that the emphasis in current practice on each aim should be decreased. In each case, the proportion of respondents favouring a decrease in emphasis was less than 4 per cent. A slightly higher proportion of teachers (11 per cent) considered that there should be a decrease in emphasis on preparing students for tertiary education.

Further analysis of these results in terms of sex and age of teachers, type of school in which employed (government, Catholic, non-government non-Catholic) and amount of full-time work experience (none, one year or less, more than one year) was undertaken. In all, 152 main effect comparisons were considered. A main effect comparison consists, for example, of comparing the extent of agreement on a particular item for teachers in the various types of school. Of the 152 main effect comparisons, 17 were "significant" in a statistical sense (at the .05 level). In absolute terms, however, most of these differences were quite small. These results therefore generally support a high degree of consistency across the groups of teachers. That is, male and female teachers of all ages, employed in various types of schools and with varying degrees of work experience consider the same aims important for secondary education, and would support any increases on each aim to a similar extent.

Notwithstanding the above, appreciable differences did occur for a small number of items. These concerned varying emphases given to some items by teachers under 25 years and by teachers 25 years or older. In particular, a higher proportion of younger teachers than older teachers agreed that each of the following should be a major aim of secondary education:

- Teaching students skills that will be used directly in their jobs (75 per cent under 25 agreeing; 54 per cent 25 or over agreeing)
- Helping students understand how a business operates (91 per cent under 25 agreeing; 78 per cent 25 or over agreeing).

In addition a higher proportion of younger teachers than older teachers thought that there should be an increase in emphasis on the following aims:

- Helping students understand the expectations of employers (85 per cent under 25 endorsing increased emphasis, 71 per cent 25 years or more endorsing increased emphasis)
- Teaching students about safety in industry (57 per cent vs 46 per cent)
- Assisting students in forming positive attitudes towards work (87 per cent vs 77 per cent).

In summary, the impression gained from these results is that the teaching force strongly supports the idea that secondary schools should promote the personal development of students and should help prepare students for the "world of work" in general. They also endorse an increase in emphasis on these aims. Teachers in general are less enthusiastic about the secondary school helping to prepare students for specific types of jobs, and would not agree that there should be an increase in emphasis on these aims.

These results are generally consistent with those found by Campbell and Robinson (1979) in their survey of teachers, students, parents, business people and unionists. They found that, overall, a higher proportion of respondents agreed that a primary function of schools should be "to develop in each child a sense of personal worth and esteem" than agreed that a primary function of schools should be "to prepare children to enter the workforce". Further, a higher proportion considered that the present emphasis in school practice on the former aim should be increased than did for the latter aim. Campbell and Robinson's study also showed that a higher proportion of students, parents, business people and unionists considered that a primary aim of schools should be to prepare students to enter the workforce. Teachers were also the group who least supported an increase in this aim, while business people were most supportive of an increase.

Reviewing the Australian literature, Sturman (1979) concluded that students themselves considered that they had been given inadequate preparation for the world of work. In particular, students considered that the career education and guidance they had received at school had been of little help in preparing them for the world of work.

Place of Different Curriculum Areas in Preparing Students for the World of Work

Moving from the level of the overall aims of secondary education to specific subjects within the secondary school, teachers were asked whether, for their major subject area, they considered that the curriculum adequately prepared students for the world of work. The results overall, and for the major curriculum areas, are given in Table 17.

Table 17: Proportion of teachers overall and in major curriculum areas who considered that the curriculum adequately prepared students for the world of work

Year Level	SUBJECT						
	Overall	English	Maths	Natural Sciences	Home Economics	Commercial	Manual Arts
	%	%	%	%	%	%	%
Year 8	44	56 (46)	59 (42)	43 (47)	38 (37)	-	35 (34)
Year 9/10	57	73 (59)	60 (50)	46 (52)	57 (37)	68 (38)	56 (34)
Year 11/12	57	53 (51)	63 (43)	37 (53)	72 (25)	57 (30)	79 (24)

(Numbers in brackets represent total number of respondents, for each subject within Year level, to the question.)

In general, and within subject areas, teachers considered that the Year 8 curriculum less adequately prepared students for the world of work than did the curriculum at other Year levels. In reading teachers' comments, however, a large number of teachers considered that Year 8 should not be expected to prepare students for the world of work. Many teachers felt Year 8 should be a consolidation of the work of primary school or a general preparation for the later years of secondary school.

At both Year levels 9/10 and 11/12, all major subject areas, except the sciences, were seen by more than 50 per cent of teachers as adequately preparing students for the world of work. In particular, English and Commercial subjects at the lower secondary level, and Manual Arts and Home Economics at the upper secondary level were considered to be preparing students adequately by a substantial majority of teachers.

Those teachers who said that the curriculum was adequately preparing students for the world of work were asked to indicate in which ways in particular it was doing this. Those who claimed that the curriculum was inadequately preparing students for the world of work were asked to indicate what might be included in the curriculum to more adequately prepare students for the world of work. The results of these open-ended comments for the major curriculum areas are reported briefly below.

English

At the lower secondary level, teachers pointed to the skills of reading, writing, speaking and listening and more specific employment-related skills such as form-filling, letter-writing and interview techniques as being important ways in which the English curriculum helped students enter the world of work. Some teachers also mentioned that a careers unit was incorporated into their program. In the upper secondary school, while basic literacy was still seen as important, there was a tendency for teachers to see the affective aspects of a student's development as related to preparation for the working world. Examples cited included values formation, heightened sensitivity to world around them, emphasis on world issues, self-confidence and understanding of human experience through literature.

Although there was only a weak desire by teachers to have the English curriculum at lower secondary level changed to make it more relevant to the world of work, suggestions for change included introduction of public speaking, values education and literature more closely related to life experiences of the students. It was also suggested that work experience for students could be introduced. In Years 11/12, a number of teachers felt that there was too much emphasis on literature in the English curriculum. It was suggested that the English curriculum might include simulation of employment-related activities, job interview role plays, public

speaking, work experience for students and greater emphasis on material from magazines, newspapers and government reports. Some teachers felt that the introduction of these types of components into the English curriculum could be facilitated by the introduction of a second English course, for example, Business English.

Mathematics

In the lower secondary school, helping students with "basic" numeracy skills was considered by teachers to be an important way mathematics prepared students for the world of work. More specific examples such as taxation, insurance, hire purchase, use of computers and calculators, measurements, estimates and approximations were also mentioned. At Year levels 11 and 12, the content of the Social Mathematics course was considered to be most relevant to the world outside the school. In particular, Social Mathematics developed an awareness of the use of computers, finance, probability and statistics, and social implications of mathematics. The course was considered useful by teachers because of its essentially practical orientation. On the other hand, Mathematics I and Mathematics II were seen as being related to the world of tertiary education.

Teachers considered that one way of making the mathematics curriculum more relevant to the world of work would be to introduce more applied mathematics and to relate it more closely to real-life situations. Students might then be able to see how mathematics is useful in realistic and practical situations. A number of teachers questioned whether the aim of mathematics should be to prepare students for the world of work.

Sciences

At the lower secondary level, science was seen to provide a "broad overview" of scientific principles; it was not necessarily related directly to the world of work. A comment from a lower secondary science teacher typifies this type of response: "the science curriculum probably has no direct relevance to work, but it gives students a basic idea of the laws of the world as well as basic ideas of biological phenomena". Other teachers reported that learning how to read scales, record data, write reports and work in a laboratory were aspects of the science course in Years 8, 9 and 10 which had direct application to employment.

In the upper secondary school, the following aspects were mentioned as ways in which science helped students as future participants in the world of work: preparation for further study, helps students work independently, develops abstract thought processes in students, encourages objective decision-making, helps students understand their own bodies.

To make science more relevant, teachers of lower secondary school students suggested that the practical application of scientific principles should be given greater emphasis in the curriculum. One teacher aptly summed up these feelings when he reported that there should be a -

> more balanced blend of theory and application necessary to establishing relevance for the student. There is too great an emphasis on theory - many students fail to see any relation between what they are taught and the world of work.

One way of obtaining this, some teachers suggested, would be to have more work experience as part of the curriculum in the sciences. For Years 11 and 12, some teachers also echoed these sentiments, although a number said that the aim of secondary science in Years 11 and 12 was to prepare students for tertiary education.

Home Economics

Teachers reported that Home Economics helped prepare students for the working world by: developing human relationships skills, consumer education, use of leisure-time activities, budgetary management, and by providing courses on and experience in sewing and clothing design, cooking and interior decoration.

Those teachers who felt that Home Economics was not adequately helping students to enter the world of work considered that the course could be made more practical

by, for example, studying industrial and business methods of food and textile production, showing how skills are used directly in specific occupation and providing opportunities for simulated interviews and work experiences. Lack of time allocated to Home Economics was also cited as a reason why the Home Economics course was unable to be of more benefit to students.

Commercial Subjects

Teachers of commercial subjects pointed to typing, shorthand and office procedures (e.g. petty cash book, telephone use, postage book) as being of direct relevance to employment. Several teachers made comments such as "Typing and General Commercial Studies courses are based on what the students will have to know and use in the office situation". In the Shorthand and Typing classes taken by one teacher "as near office conditions as possible were maintained".

There were, nonetheless, a small number of teachers who felt that commercial subjects should be related more to a real life situation, for example, by using the books of a local business firm. Other teachers suggested that data processing and the use of computers could be introduced into the courses. There was also a plea from some teachers for more up-to-date business equipment (e.g. electric typewriters) to be available to their students.

Manual Arts

Manual arts courses developed students' manual skills and co-ordination and provided them with experience of using a wide range of tools and materials. It also taught them about safety in industry. Especially in the upper school, a small number of teachers reported that their students participated in workshop courses closely related to a real work situation in which they filled out time sheets and the like. One respondent reported that students are set tasks similar to those in an apprenticeship.

Of the few teachers who claimed that manual arts subjects did not adequately prepare students for the world of work, the most common complaint at the lower secondary level was that the technical drawing course was out of date. A second point was that some teachers considered that more modern materials and techniques should be used. For example, a teacher of lower secondary school students reported that the curriculum used dovetailing joints with woodwork, when industries used particle board as a medium, thus making the study of dovetail joints of limited use.

Some General Comments

The impression gained in reading through the teachers' comments tends to reinforce the results from the question on overall aims of secondary education. It seems that teachers are concerned with preparing students for the working world. However, they would agree that preparation for the world of work is but one aspect of a school's role. Moreover, teachers do not think that the school should prepare students for specific occupations in society (although some teachers of commercial subjects, and to a lesser extent manual arts and home economics teachers did consider that schools could prepare students for certain occupations). Perhaps the role of the secondary school is best expressed in the comments of a history teacher, who was expressing the views of many of his colleagues when he stated:

> On average, an ordinary citizen spends 35-40 hours a week at work, 56 hours a week sleeping and the remaining 70+ hours a week in general living. I feel very strongly that it is not necessary for every subject to cater for work preparation, and although history has some application in the field of work, I am not prepared to justify it in these terms. . . . it is necessary to retain subjects such as history for cultural enrichment and social awareness.

REPORTED TEACHER ATTITUDES TOWARDS WORK

This chapter seeks to explore the reported attitudes of teachers towards work. To measure attitudes towards work, teachers were asked to rate their extent of agreement on a five point scale (strongly agree, agree, undecided, disagree, strongly disagree) with each of 19 items. The items were designed to investigate attitudes towards: the value teachers placed on different types of occupations, the influence academic achievement and personal choice should have in determining a student's career choice and the place of student part-time and voluntary work.

This information was collected with the expectation that a teacher's reported attitude towards these areas might influence the manner in which he teaches about the world of work. For example, if teachers highly value tertiary education and professional careers, but consider that manual occupations are of little value, it is possible that this will subtly influence the types of occupations to which their students will aspire.

Table 18: Reported teacher attitudes towards work

Item No.	Item	Proportion agreeing with statement %
15.	If time permits, it is a good idea for students to undertake voluntary community service outside school hours	96
10.	Teachers should emphasise that manual work makes a positive contribution to society	95
13.	It is a good idea for students to undertake some form of manual training	92
19.	Students should not be discouraged from entering manual occupations if they wish to do so	92
3.	Students should choose the career in which they are most interested	91
14.	If time permits, it is a good idea for students to undertake paid part-time work outside school hours	86
8.	Academic achievement should be seen only as a general guide to career choice	84
4.	Students should not be discouraged from entering unskilled occupations if they wish to do so	79
12.	Students who cannot cope with the academic school curriculum at upper secondary level should seek employment	79
17.	Manual occupations should be regarded more highly than at present	74
5.	Academically talented students should be discouraged from entering the workforce immediately after Year 10	69
2.	The academic achievement level of a student should be a major factor in determining his choice of career	67
7.	Students with a good academic record should be discouraged from choosing unskilled occupations	63
11.	Students who cannot cope with the academic school curriculum at lower secondary level should seek employment	59
1.	Unskilled occupations should be regarded more highly than at present	59
6.	A high level of academic achievement is a necessary prerequisite for getting a "high status" job	48

Item No.	Item	Proportion agreeing with statement
		%
6.	Academically talented students should be discouraged from entering the workforce after Year 12	38
16.	It is generally better for students to commence tertiary education after Year 12 than to enter the workforce	26
18.	Students with a good academic record should be discouraged from choosing manual occupations	19

The picture of secondary teacher attitudes painted by the above items portrays teachers as valuing manual and unskilled work in general, but not to the extent that academically talented students should choose unskilled occupations (Item 7). Teachers, however, would not discourage students, academically talented or otherwise, from choosing manual occupations. They consider that academically talented students should continue their education until at least Year 12, when they should not be discouraged from entering the workforce if they wish to. Teachers did not see tertiary education as preferable to work after Year 12. There was less support for the idea that students who cannot cope with the school curriculum at lower secondary level should seek employment than for the notion that they should seek employment if they cannot cope at the upper secondary level. Teachers strongly supported students' undertaking part-time or voluntary work if time was available.

Reported teacher attitudes were further analysed by sex, age, type of school and amount of full-time work experience (none, one year or less, more than one year). Differences were not startling. A number of differences are, however, noted below.

- A larger proportion of teachers without full-time work experience agreed that it was generally better for a student to commence tertiary education after Year 12 than to enter the workforce.
- Those with more than twelve months' full-time work experience less strongly supported the idea that academically talented students should be discouraged from entering the workforce immediately after Year 10 than did teachers with one year or less of work experience or no full-time work experience at all.
- Teachers in government secondary schools agreed less strongly than teachers in non-government schools that -
  - if time permits, it is a good idea for students to undertake voluntary community service outside school hours
  - students should not be discouraged from entering manual occupations if they wished to do so
  - it is generally better for a student to commence tertiary education after Year 12 than to enter the workforce.

The last-mentioned item was least strongly supported by teachers in non-government non-Catholic schools.

The above findings indicate that the reported teacher attitudes towards work varied little with respect to the full-time work experience of the teachers, their sex and age and the type of school in which they were teaching. It appears, then, that time spent in employment other than teaching has little impact on the kinds of attitudes expressed in the items used in this study.

CONCLUSIONS

This study has examined the background characteristics, work experience, extent of contact with the world of work and attitudes towards work of teachers in secondary schools in Queensland and these teachers' views concerning the role and aims of secondary education particularly as they relate to preparation for the world of work. Where appropriate, comparisons were drawn between teachers having different amounts of full-time work experience, in different types of schools, of various ages and of either sex, and teaching in different curriculum areas.

The study did not attempt to show the amount of student involvement with the world of work, to describe, list or evaluate the many school programs of student work experience or to determine how a teacher's experience in other forms of work effects the way in which he is able to prepare his students to enter the working world. Rather, the intention was to provide some information on the individual teacher in the areas outlined above, which, it is hoped, will be useful in further considering the relationship between secondary schooling and work and its possible implications for teacher education.

Summary

On the one hand, it could be argued that there is little evidence to support the contention that teachers lead an "ivory tower" existence, neither having nor wanting any direct contact with the world of work through previous employment, or having contact with other occupations as children. The results show that over half of the teachers had some full-time work experience outside teaching, while two-thirds had some part-time work experience. Furthermore, a large majority of teachers would be prepared to participate in a program of alternative work experience. Teachers had come from a variety of family backgrounds ranging from homes in which the father was an unskilled worker to professional homes.

On the other hand, the results also show that the work experience, other than teaching, that teachers have participated in has been mainly for short periods of time. Only 13 per cent of teachers had been involved in another occupation, full-time, for more than two years.

A substantial majority of secondary teachers had not organised representatives of business and industry or employee associations to talk to students in their classes. A similar large proportion of teachers had not taken their students to places of employment. However, in many schools, the organisation of these visits was the responsibility of the careers or guidance officer. Teachers might not have seen it as part of their role to organise such visits. Moreover, teachers wanted more school-work contact of this type. The major factors preventing this were those over which the teacher could exert little individual influence, viz., lack of time and time-tabling difficulties.

Teachers value manual, if not unskilled work, highly and would not discourage students from choosing manual occupations if they wished to. The results do not provide evidence that teachers are pushing their students towards tertiary education. They indicate that teachers would accept that students might legitimately choose manual occupations as worthwhile alternatives to tertiary study.

While agreeing that secondary schools should prepare students for tertiary education, teachers saw the school's role in the personal development of students and in preparing students for the world of work in general as more important. Teachers did not, however, consider that secondary schools should prepare students for specific occupations. It was also felt by teachers that more emphasis should be placed both on the personal development of students and general preparation for the world of work, but not on preparing students for tertiary education.

Teachers considered that one means of placing more emphasis on helping students to prepare for the world of work would be to relate the curriculum to more practical real-life situations encountered by students. Research by the Schools Commission (1980) indicates that more students would also find greater usefulness in a curriculum which was related directly to their own personal experiences. The Schools Commission report warns, however, that it is not desirable to have a curriculum based purely on the practical needs and interests of the students. A balance between academic and practical aspects should be maintained.

In summary, the impression gained from the results is that teachers see secondary schools as having a role to play in helping students enter the working world. Further, teachers consider that more emphasis should be given to this aim. They were willing to participate in programs of alternative work experience and were keen to have more employer or employee representatives visit their classes, and to visit places of employment with their students. Nonetheless, teachers considered helping students to prepare for the working world to be but one aim of secondary schools, and some teachers felt that students were prepared for the world of work through a general education. Perhaps the views of teachers are best expressed by Jochimsen who claimed at the 1979 conference of the Australian College of Education that "one aim of education is preparation for work . . . but preparation for work can't be allowed to dominate education" (Jochimsen, 1980, p.82).

Issues for Consideration

A number of issues for further consideration have emerged from the research. These suggestions, listed below, are not meant to be an exhaustive list of ways in which secondary schools and the world of work can co-operate more closely, but they include several pertinent points arising from this project.

- Given that teachers consider programs of alternative work experience to be valuable and that they would be willing to participate in them, employers might consider ways of providing opportunities for teachers to undertake other forms of work.

- Any programs of alternative work experience should be carefully evaluated. Although difficult, the evaluation should, inter alia, examine the ways in which a teacher's experience in alternative occupations is translated into classroom practice. In particular, it would be significant to ascertain whether teachers who have had experience in other occupations are able to prepare their students more adequately for the working world.

- Tertiary institutions responsible for the pre-service preparation of teachers could consider ways in which student teachers can be given more opportunities to discuss the aims of secondary education as they relate to preparation for the world of work.

- The discussion about the secondary school's role in preparing students for the world of work might be more meaningful to student teachers if they have themselves had experience in occupations other than teaching. Tertiary institutions could therefore consider the desirability and feasibility of arranging opportunities for their students to participate in other types of work before or during their teacher preparation.

- Tertiary institutions might examine the mechanism whereby future teachers could be made more aware of ways in which they can introduce concepts relating to the world of work into their teaching.

- Schools could examine ways of making the school timetable more flexible to enable individual teachers and their students to have more contact with the working world.

- Ways of providing greater opportunities for teachers and students in country schools to have exposure to a wider range of occupations might be considered by school systems.

While the above list emphasises the work preparation function of secondary education, it is not meant to imply that other roles of secondary education are unimportant. Further, each of the suggestions is concerned with ways in which students might be better prepared for the world of work. This is not intended to convey the impression that future members of the workforce should be moulded to suit the expectations of employers. In addition to schools considering ways in which they can prepare students more adequately for the working world, employers should consider how the world of work can make the best use of the abilities and aspirations of today's and tomorrow's secondary school leavers.

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